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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,242	03/15/2004	Andy L. Lee	306812006200	2030
47520	7590	09/13/2005	EXAMINER	
ALTERA c/o MOFO SF 425 MARKET STREET SAN FRANCISCO, CA 94105			TAN, VIBOL	
			ART. UNIT	PAPER NUMBER
			2819	

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/801,242	Applicant(s) LEE ET AL.	
	Examiner Vibol Tan	Art Unit 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 and 22-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8, 19-23 and 32 is/are allowed.
- 6) ☒ Claim(s) 9, 12, 24, 27 and 33 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 13-18, 25, 26, and 28-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. The drawings are objected to because *in Figs. 3, 4 and 6, the reference number 300 does not point directly to the initialization circuit; and in Figs 7-10, it is not clear whether the reference number 300 points to the dashed lines or the multiplexer. However, it is noted that the dashed lines already identified by 104 and the multiplexer by 302.* Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

Art Unit: 2819

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9, 12, 24, 27 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pedersen et al. (U. S. PAT. 6,323,680) in view of New (U. S. PAT. 6,154,053).

In claim 9, Pedersen et al. teaches all claimed features in Figs. 5, 6, 10 and 11, a logic circuit comprising: a first series of logic elements (30), each logic element having a look-up table (402) and a dedicated adder (800) to implement an arithmetic mode in the logic element; a carry chain (COIN-C1IN) connecting the first series of logic element; with the exception of teaching an initialization circuit connected to the carry chain to initialize the carry chain, and an initialization value selection circuit. However, New teaches in Fig. 6, an initialization circuit (115) connected to the carry chain (CA_i , CB_i) to initialize (114) the carry chain; and an initialization value selection circuit (113) connected to the initialization circuit, wherein the initialization selection value circuit is configured to generate a logic zero (to provide a logic 0 signal; col. 7, line 41) or a logic one as an initialization value for the initialization circuit (115).

Therefore; it would have been obvious to one ordinary skill in the art at the time of the invention was made to combine the teachings of Pedersen et al. with the teachings of New in order to provide a new improved logic circuit that speeds up arithmetic operation and takes traffic off the interconnection network.

In claim 12, Pedersen et al. teaches all claimed features in Figs. 5, 6, 10 and 11, a logic circuit comprising: a first series of logic elements (30), each logic element having a look-up table (402) and a dedicated adder (800) to implement an arithmetic mode in the logic element; a carry chain (COIN-C1IN) connecting the first series of logic element; with the exception of teaching an initialization circuit connected to the carry chain to initialize the carry chain, wherein the initialization circuit is disposed within the adder in a logic element. However, New teaches in Fig. 6, an initialization circuit (115) connected to the carry chain (CA_i , CB_i) to initialize (114) the carry chain, wherein the initialization circuit is disposed within the adder in a logic element.

Claims 24 and 27 correspond to detailed circuitry already discussed similarly with regard to claims 9 and 12.

Claim 33 corresponds to detailed circuitry already discussed similarly with regard to claim 9.

3. Claims 10, 11, 13-18, 25, 26, and 28-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 2-8, 19-23 and 32 appear to comprise allowable subject matter(s).

Response to Arguments

In view of further consideration, new ground of rejection(s) is set forth as discussed above.

Art Unit: 2819

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VIBOL TAN
PRIMARY EXAMINER